

METHOD FOR REMOVING NANOCLOUDS FROM SELECTED REGIONS

Abstract of the Disclosure

5 Nanoclusters are blanket deposited on an integrated circuit and then removed from
regions where the nanoclusters are not desired. A sacrificial layer is formed in those regions
where the nanoclusters are not desired prior to the blanket deposition. The nanoclusters and
the sacrificial layer are then removed. In one form, the sacrificial layer includes a deposited
nitride containing or oxide containing layer. Alternatively, the sacrificial layer includes at
10 least one of a pad oxide or a pad nitride layer previously used to form isolation regions in the
substrate. Nanocluster devices and non-nanocluster devices may then be integrated onto the
same integrated circuit. The use of a sacrificial layer protects underlying layers thereby
preventing the degradation of performance of the subsequently formed non-nanocluster
devices.